

## ABSTRACT

In the Autobus Company, there are some problems, especially for economy class. Management doesn't know exactly how much income from each bus everyday. It's happen because on economy class, the passengers freely ride and off the bus anyplace along the bus route. This conditions more severe because the passenger don't want to user the ticket system. This case would potentially lower the income from each bus and potentially harm the company.

On this thesis, has done the design and implementation of Bus Ticketing System using GPS to determine location and rise time passenger. The passenger destination has determine by choose destination city displayed on monitor using push the button. Then information has been processed using processor to determine the price must be paid by passengers. From that process, will be collect four information, that is rise time, the initial place, destination city, and price must be paid. All of this information will be printed on paper and will be saved on SD-Card.

The result of system testing showed that as systemic, the bus ticketing system has been realized complies with the specifications and conditions of the desired. The system capable to work at 24 volt DC supply, GPS coordinates have an accuracy to 1meter, capable to determining the location where passengers ridewith100% accuracy, capable of storing information-transaction information, and able to perform printing of tickets based on transaction information automatically.

Key words : Bus Ticketing System, Global Positioning System, SD-Card